

**Appl. No. 10/657,585**  
**Amendment and Response dated June 22, 2006**  
**Reply to Office Action of March 29, 2006**

### **REMARKS**

Applicant acknowledges receipt of the non-final Office Action dated March 29, 2006 in which the Examiner withdrew the finality of the Final Office Action dated October 17, 2005; rejoined previously-withdrawn Claims 63-71 and 74-75 with the present Application; and rejected Claims 21-30 under 35 U.S.C. § 102(b) as being unpatentable over Fraenkel et al., U.S. Patent No. 5,565,399 (hereinafter "*Fraenkel*"). The Examiner also indicated that the application contained allowable subject in that Claims 1-11, 13-20, 32, 34, 35, 37, 38, 42-49, 51-71 & 74-78 are now allowed. In addition, the Examiner has objected to Claims 1, 21, 29, 32, 43-49, 52-54, 63, 67 and 75 for informalities.

Applicants would like to take this opportunity to thank the Examiner for her time and effort expended to examine the present Application and especially for providing a straight forward and thorough explanation of the bases of rejection and objections. Applicant further appreciate the Examiner's reassessment of the previously withdrawn claims and her decision to rejoin them to this Application based on MPEP §821.04.

By this Amendment, Applicant intends to take the allowable subject forward and correct the objections that were noted by the Examiner and move this application into immediate condition for allowance.

#### **I. Status of the Claims**

Claims 1-11, 13-30, 32, 34, 35, 37, 38, 42-49, 51-71 & 74-78 were pending in the present Application. By this Response, Claims 1, 32, 43-49, 52-54, 63, 67 and 75 are currently amended to address the Examiner's objections; Claims 21-30 and 70 are now canceled; Claim 71 is currently amended to add the limitation of currently-canceled Claim 70 from which it depended; and Claims 79-96 are newly added claims which are dependent from allowed independent Claims 32 and 63.

As a result, Claims 1-11, 13-20, 32, 34, 35, 37, 38, 42-49, 51-69, 71 and 74-96 (corresponding to a total of 75 pending claims) are now currently pending and are all allowable.

#### **II. Claim Objections.**

Claims 1, 21, 29, 32, 43-49, 52-54, 63, 67 and 75 were objected to by the Examiner in the non-final Office Action dated March 29, 2006. In reply, Applicant has canceled Claims 21 and 29

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and amended Claims 1, 32, 43-49, 52-54, 63 and 75 with the changes proposed by the Examiner on Pages 3-4 of the above mentioned Office Action.

Furthermore, objected Claim 67 was also amended to improve claim form and now recites: "wherein the process produces a hydrocarbon mixture having an alpha value of at least 0.85." Applicant believes that this amendment does not alter the scope of the claim and its intended meaning, and such language has appropriate antecedent support from Claim 63 from which Claim 67 depends. However, should the Examiner find such language in Claim 67 not acceptable, she is encouraged to call the undersigned with her suggestions, so that such informality can be resolved quickly without causing further delay.

Applicant believes that no new matter was introduced by way of such amendments, and Applicant respectfully requests the Examiner to withdraw the objections to Claims 1, 32, 43-49, 52-54, 63, 67 and 75 for their immediate allowance.

### **III. Rejection over *Fraenkel*.**

Claims 21-30 were rejected as being anticipated under 35 U.S.C. § 102(b) over *Fraenkel*. By this Response, Applicant cancelled Claims 21-30 without prejudice in order to move the Application towards allowance. Thus, Applicant respectfully requests the Examiner to withdraw such rejection.

### **IV. Rejoinder of withdrawn Claims 63-71 & 74-75**

The Examiner has stated on Page 2 in the above mentioned Office Action dated March 29, 2006 that the previously-withdrawn Claims 63-71 & 74-75 are now rejoined with the elected invention in the present Application. Applicant has taken great care in entering the status identifier of each claim which was previously identified as 'Withdrawn'.

Claims 63, 67, 71 and 75 are amended in this Amendment, and as such each is identified as 'Currently amended'.

Claims 64, 65, 68, 69 and 74 remain as originally filed, and as such each is identified as 'Original'.

Claim 66 was previously amended in the Amendment dated February 7, 2006, and as such Claim 66 is identified as 'Previously presented'.

Applicant believes that the current status identifiers for the rejoined 63-71 & 74-75 are

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proper. Should the Examiner disagree, she is encouraged to call the undersigned before issuing a Notice of Non-Compliant Amendment in order for any improper status identifier to be corrected quickly without causing further delay.

**V. New Claims 79-96 are allowable.**

Applicant further added new Claims 79-90 which depend from currently-amended Claim 32 and new Claims 91-96 which depend from currently-amended Claim 63, in order to add embodiments to which the Applicant is entitled.

The new claims and their respective support in the Application are as follows:

- Claim 79 dependent from Claim 32 and Claim 92 dependent from Claim 63 recite "wherein the catalyst comprises between about 15% and about 35% by weight of cobalt to final weight of catalyst", which is supported by the Application as originally filed, for example by at least paragraph [0058] on Page 18 of the specification as filed.
- Claim 80 dependent from Claim 32 recites "wherein the trivalent rare-earth metal is present in an amount between about 1% and about 15% by weight of metal to final weight of modified support", which is supported by the Application as originally filed, for example by at least originally filed Claim 25 and paragraph [0048] on Page 15 of the specification as filed.
- Claim 81 dependent from Claim 32 and Claim 91 dependent from Claim 63 recite "wherein the at least one rare-earth metal is present in an amount between about 3% and about 10% by weight of metal based on the final weight of the modified support", which is supported by the Application as originally filed, for example by at least paragraph [0048] on Page 15 of the specification as filed.
- Claim 82 dependent from Claim 32 recites "wherein the trivalent rare-earth metal is selected from the group consisting of lanthanum, praseodymium and neodymium", which is supported by the Application as originally filed, for example by at least paragraph [0038] on Page 11 of the specification as filed.
- Claim 83 dependent from Claim 32 and Claim 94 dependent from Claim 63 recite "wherein the rare-earth metal oxide modified catalyst support has a surface area between about 40 m<sup>2</sup>/g and about 150 m<sup>2</sup>/g; and a pore volume between about 0.1 cm<sup>3</sup>/g and about 0.5 cm<sup>3</sup>/g", which is supported by the Application as originally filed, for example by at least originally filed Claim 29 and paragraph [0052] on Page 16 of the specification as filed.

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- Claim 84 dependent from Claim 32 recites "wherein the rare-earth metal oxide modified catalyst support has a surface area between about 70 m<sup>2</sup>/g and about 130 m<sup>2</sup>/g.", which is supported by the Application as originally filed, for example by at least paragraph [0052] on Page 16 of the specification as filed.
- Claim 85 dependent from Claim 32 recites "wherein the surface coverage coats the alumina material completely", which is supported by the Application as originally filed, for example by at least paragraph [0050] on Page 16 of the specification as filed.
- Claim 86 dependent from Claim 32 recites "wherein the surface coverage has a thickness of at least about 0.2 nanometer", which is supported by the Application as originally filed, for example by at least paragraph [0050] on Page 16 of the specification as filed
- Claim 87 dependent from Claim 32 recites "wherein the surface coverage is between about 0.2 nm and about 0.5 nm in thickness", which is supported by the Application as originally filed, for example by at least originally filed Claim 12 and paragraph [0042] on Page 13 of the specification as filed.
- Claim 88 dependent from Claim 32 recites "wherein the rare-earth metal oxide modified catalyst support comprises at least 20% delta-alumina; at least 20% theta-alumina; or at least 20% of combined delta-theta-alumina", which is supported by the Application as originally filed, for example by at least paragraph [0047] on Page 15 of the specification as filed.
- Claim 89 dependent from Claim 32 and Claim 93 dependent from Claim 63 recite "wherein the rare-earth metal oxide modified catalyst support comprises at least 20% theta-alumina.", which is supported by the Application as originally filed, for example by at least paragraph [0047] on Page 15 of the specification as filed.
- Claim 90 dependent from Claim 32 recites "wherein the catalyst is in the form of particles which are embedded in oil or solid hydrocarbon", which is supported by the Application as originally filed, for example by at least originally filed Claim 50, paragraph [0024] on Page 8 of the specification as filed and paragraph [0069] on Page 22 of the specification as filed.
- Claim 95 dependent from Claim 63 recites "wherein the catalyst further comprising no more than about 10 mol% aluminate spinels comprising the catalytically active metal before, during or after said process", which is supported by the Application as originally filed, for example by at least

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originally filed Claim 46.

- **Claim 96** dependent from Claim 63 recites "wherein the catalyst is essentially free of aluminate spinels comprising the catalytically active metal before or during said process", which is supported by the Application as originally filed, for example by at least paragraph [0070] on Page 22 of the specification as filed.

Since new Claims 79-90 depend from Claim 32 which is allowed, Applicant submits that Claims 79-90 must also be allowable, as each carries at least all the limitations of such independent claim. Similarly, since new Claims 91-96 depend from Claim 63 which is allowed, Applicant submits that Claims 91-96 must also be allowable, as each carries at least all the limitations of such independent claim. Applicant submits that no new matter was added by addition of such claims, as all new claims are supported by the Application as filed.

For the reasons stated above, Applicant respectfully requests the Examiner to allow new Claims 79-96.

#### **VI. Information Disclosure Statement filed April 15, 2005**

Applicant filed a Supplemental Information Disclosure Statement (IDS) on April 15, 2005 which has been entered in the electronic Image File Wrapper available via the USPTO PAIR system. However such supplemental IDS does not appear to have been considered by the Examiner as no initialed Form 1449A was attached to the Office Actions dated April 21, 2005; October 10, 2005; and March 29, 2005.

Thus, it is respectfully requested that Form 1449A submitted on April 15, 2005 be considered and officially cited in the examination of this Application.

#### **VII. Conclusion**

Applicant believes that this reply fully responds to the Office Action dated March 29, 2006, and that all claim amendments and new claims are supported by the Application as originally filed and do not present any new matter. Applicant believes that this amendment places the application in immediate condition for allowance, as all currently pending Claims 1-11, 13-20, 32, 34, 35, 37, 38, 42-49, 51-69, 71 and 74-96 are allowable over the art of record.

Favorable action at the Examiner's earliest convenience is respectfully solicited.

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Should there be any remaining issue which the Examiner believes would possibly be resolved by a conversation, the Examiner is invited to call the undersigned at (281) 293-4751 so that further delay in a Notice of Allowance can be avoided.

The Application was originally filed with 75 claims in total; therefore, the addition of eighteen (18) new claims (i.e., Claims 79-96) to the fifty-seven (57) pending claims (i.e., Claims 1-11, 13-20, 32, 34, 35, 37, 38, 42-49, 51-69, 71 and 74-78) results in the same number (75) of claims as originally submitted. Thus, the addition of 18 new claims should not result in additional claim fees.

However, should any fees have been inadvertently omitted, or if any additional fees are required or have been overpaid, or in the event that an extension of time is necessary in order for this submission to be considered timely filed, the Commissioner is authorized to please appropriately charge or credit those fees to Deposit Account Number 16-1575 of ConocoPhillips Company, Houston, Texas and consider this a petition for any necessary extension of time.

Respectfully submitted,



Beatrice C. Ortego  
PTO Reg. No. 54,350  
ConocoPhillips Company  
600 North Dairy Ashford  
Houston, TX 77079-1175  
(281) 293-4751  
AGENT FOR APPLICANTS